

In the Claims

Please amend the claims as follows:

1. (Original) A composition comprising:  
a macromer prepared by reacting an unsaturated diacid having a carbon-carbon double bond and a saturated diacid; and  
a bioactive ceramic grafted to the macromer.
  
2. (Original) The composition of claim 1 wherein:  
the unsaturated diacid having a carbon-carbon double bond is fumaric acid.
  
3. (Original) The composition of claim 2 wherein:  
the saturated diacid is selected from diacids compatible with fumaric acid and poly(propylene fumarate).
  
4. (Original) The composition of claim 3 wherein:  
the saturated diacid is selected from succinic acid, glutaric acid, adipic acid, pimelic acid, suberic acid, azelaic acid, sebacic acid and mixtures thereof.
  
5. (Original) The composition of claim 2 wherein:  
the bioactive ceramic is hydroxyapatite.
  
6. (Original) The composition of claim 5 wherein:  
the hydroxyapatite is grafted to the macromer by way of silicate groups.
  
7. (Original) The composition of claim 1 wherein:  
the macromer is prepared by reacting the unsaturated diacid having a carbon-carbon double bond, the saturated diacid, and a silane coupling agent.
  
8. (Original) The composition of claim 7 wherein:  
the unsaturated diacid having a carbon-carbon double bond is fumaric acid,  
the saturated diacid is selected from diacids compatible with fumaric acid and poly(propylene fumarate), and  
the silane coupling agent is a dihalodialkylsilane.

9. (Original) The composition of claim 8 wherein:

the saturated diacid is selected from succinic acid, glutaric acid, adipic acid, pimelic acid, suberic acid, azelaic acid, sebacic acid and mixtures thereof.

10. (Original) The composition of claim 7 wherein:

the macromer is prepared by reacting the unsaturated diacid having a carbon-carbon double bond, the saturated diacid, the silane coupling agent, and an ester of the saturated diacid.

11. (Original) The composition of claim 10 wherein:

the saturated diacid is adipic acid,

the silane coupling agent is a dichlorodimethylsilane, and  
the ester is a monomethyl ester of adipic acid.

12. (Original) The composition of claim 10 wherein:

the bioactive ceramic comprises hydroxyapatite particles having a particle size of less than 10,000 nanometers.

13. (Original) A composition comprising:

a macromer including silane units, units derived from an unsaturated diacid having a carbon-carbon double bond, and units derived from a saturated diacid; and

a bioactive ceramic grafted to the macromer.

14. (Original) The composition of claim 13 wherein:

the macromer includes silane units, fumarate units, and units derived from a saturated diacid, and

the bioactive ceramic is hydroxyapatite.

15. (Original) The composition of claim 13 wherein:

the macromer includes silane units, fumarate units, and adipate units, and

the bioactive ceramic is hydroxyapatite.

16. (Original) The composition of claim 13 wherein:

the bioactive ceramic is hydroxyapatite.

17. (Original) The composition of claim 16 wherein:  
the hydroxyapatite is grafted to the macromer by way of silicate groups.

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)

26. (New) A biodegradable composite comprising:  
(a) a polymeric matrix; and  
(b) the composition of claim 1 crosslinked to the matrix.

27. (New) The composite of claim 26 wherein:  
the matrix has a carbon-carbon double bond.

28. (New) The composite of claim 27 wherein:  
the matrix comprises poly(propylene fumarate).

29. (New) The composite of claim 26 wherein:  
the composite is suitable as a scaffold for tissue regeneration.

30. (New) The composite of claim 29 wherein:  
the tissue is bone.

31. (New) A crosslinkable, biodegradable material comprising:  
a polymer having a carbon-carbon double bond;  
the composition of claim 1, and  
a crosslinking agent for crosslinking the polymer and the composition.

32. (New) The material of claim 31 wherein:  
the polymer comprises poly(propylene fumarate).

33. (New) The material of claim 32 wherein:  
the crosslinking agent is a free radical intitiator.